

WHAT IS CLAIMED IS:

1. An organic light-emitting element comprising:  
at least a first electrode, an organic layer,  
a second electrode and a passivation layer, all formed  
on a substrate;

wherein a distance d from a light-emitting  
area in the organic layer to an air layer into which  
produced light enters satisfies an equation:

$d \leq \lambda/4$  ( $\lambda$ : center wavelength of emitted  
light).

2. An organic light-emitting element comprising:  
an organic electroluminescent substrate  
having at least a first electrode, an organic layer and  
a second transparent electrode formed on a substrate;  
a counter substrate; and  
a light extraction layer between the organic  
electroluminescent substrate and the counter substrate.

3. An organic light-emitting element comprising:  
an organic electroluminescent substrate  
having at least a first electrode, an organic layer and  
a second transparent electrode formed on a substrate;  
a counter substrate; and  
a light extraction layer between the organic  
electroluminescent substrate and the counter substrate;  
wherein a total thickness d of a layer ranging from a  
light-emitting area in the organic layer to the second  
transparent electrode satisfies an equation:

$d \leq \lambda/4$  ( $\lambda$ : center wavelength of emitted

light).

4. An organic light-emitting element comprising:  
an organic electroluminescent substrate  
having at least a first electrode, an organic layer and  
a second transparent electrode formed on a substrate;  
a counter substrate; and  
a light extraction layer and an auxiliary  
electrode for the second transparent electrode, both  
provided between the organic electroluminescent  
substrate and the counter substrate.

5. An organic light-emitting element comprising:  
an organic electroluminescent substrate  
having at least a first electrode, an organic layer and  
a second transparent electrode formed on a substrate;  
a counter substrate; and  
a light extraction layer and an auxiliary  
electrode for the second transparent electrode, both  
provided between the organic electroluminescent  
substrate and the counter substrate;  
wherein a total thickness d of a layer  
ranging from a light-emitting area in the organic layer  
to the second transparent electrode satisfies an  
equation:

$$d \leq \lambda/4 \quad (\lambda: \text{center wavelength of emitted light}).$$

6. An organic light-emitting element according  
to claim 2, wherein a rib is provided between the  
organic electroluminescent substrate and the counter

substrate to control a thickness of the light extraction layer.

7. An organic light-emitting element according to claim 6, wherein the thickness of the light extraction layer is 50  $\mu\text{m}$  or more.

8. An organic light-emitting element according to claim 6, wherein the rib is formed on the counter substrate.

9. An organic light-emitting element according to claim 8, wherein the rib is formed from glass or optically cured resin.

10. An organic light-emitting element according to claim 8, wherein the rib is formed on a sealed portion of the organic electroluminescent substrate and the counter substrate.

11. An organic light-emitting element according to claim 2, wherein color filters are formed between the organic electroluminescent substrate and the counter substrate.

12. An organic light-emitting element according to claim 11, wherein the color filters are formed on the counter substrate.

13. An organic light-emitting element according to claim 2, wherein a moisture absorbing layer is provided on the counter substrate.

14. An organic light-emitting element according to claim 2, wherein a moisture absorbing layer is provided around a portion sealing the organic

electroluminescent substrate and the counter substrate.

15. An organic light-emitting element according to claim 4, wherein the auxiliary electrode is formed between pixels.

16. An organic light-emitting element according to claim 4, wherein the auxiliary electrode is formed between pixels formed on the counter substrate.

17. An organic light-emitting element according to claim 4, wherein the auxiliary electrode is formed on the second transparent electrode.

18. An organic light-emitting element according to claim 17, wherein a bonding layer is provided to bring the second transparent electrode and the auxiliary electrode into ohmic contact with each other.

19. An organic light-emitting element according to claim 1, wherein the second electrode is formed from a very thin metal film with a high transmissivity.

20. An organic light-emitting display using the organic light-emitting element of claim 1.

21. An organic light-emitting display according to claim 20, wherein the organic light-emitting element corresponds to each of red, green and blue in each pixel.

22. An organic light-emitting display according to claim 20, wherein the second electrode of the organic light-emitting element is formed from a very thin metal film with a high transmissivity.

23. A mobile phone using the organic light-emitting display of claim 20 in a display portion.

2015�20189423004